

## Amendments to the Claims

1. (Currently amended) A method comprising:

allowing a first subscriber to operate on an access network;

allowing a second subscriber to operate on the access network;

receiving a first indication that the first subscriber has been authenticated by a first service provider, and responsively assigning the first subscriber to operate in a first logical layer of the access network according to a first service qualification received in the first indication, wherein the first service qualification indicates at least one of (i) one or more types of services authorized for the first subscriber and (ii) one or more extents of service authorized for the first subscriber;

receiving a second indication that the second subscriber has been authenticated by a second service provider, and responsively assigning the second subscriber to operate in a second logical layer of the access network according to a second service qualification received in the second indication, wherein the second service qualification indicates at least one of (i) one or more types of services authorized for the second subscriber and (ii) one or more extents of service authorized for the second subscriber;

handling communications in the first logical layer according to a first logic set; and

handling communications in the second logical layer according to a second logic set different than the first logic set.

2. (Original) The method of claim 1, further comprising:

before receiving the first indication, assigning the first subscriber to operate in a default logical layer of the access network; and

handling communications in the default logical layer according to a default logic set different than the first logic set.

3. (Currently amended) The method of claim 2, wherein the access network is an IP network, and wherein:

the first logical layer comprises a first IP subnet;

the second logical layer comprises a second IP subnet; and

the default logical layer comprises a default IP subnet.

4. (Original) The method of claim 2, wherein handling communications according to the default logic set comprises disallowing a certain type of communication, and handling communications according to the first logic set comprises allowing the certain type of communication.

5. (Original) The method of claim 4, wherein the certain type of communication comprises a SIP communication.

6. (Original) The method of claim 1, wherein handling communications in the first logical layer according to the first logic set comprises:

disallowing communications from the first logical layer to outside of the access network.

7. (Original) The method of claim 1, wherein handling communications in the first logical layer according to the first logic set comprises:

disallowing a predetermined type of communication from passing from the first logical layer to outside of the access network.

8. (Original) The method of claim 1, wherein handling communications in the first logical layer according to the first logic set comprises:

detecting a web page being sent to an address on the first logical layer; and  
injecting into the web page information specific to the first service provider.

9. (Original) The method of claim 8, wherein the information comprises an advertisement for the first service provider.

10. (Original) The method of claim 1, wherein the access network is an IP network, and wherein:

the first logical layer comprises a first IP subnet; and  
the second logical layer comprises a second IP subnet.

11. (Original) The method of claim 1, wherein the subscriber communicates via an air interface with the access network.

12. (Currently amended) A method comprising:  
allowing a first wireless subscriber to operate on an access network and assigning the first wireless subscriber to operate in a default IP subnet of the access network;

allowing a second wireless subscriber to operate on the access network and assigning the second wireless subscriber to operate in the default IP subnet of the access network;

receiving a first indication that the first wireless subscriber has been authenticated by a first service provider, wherein the first indication provides a first service qualification indicating at least one of (i) one or more services authorized for the first wireless subscriber and (ii) one or more extents of service authorized for the first wireless subscriber;

~~and responsively~~ responsive to the first indication, assigning the first wireless subscriber to operate in a first IP subnet of the access network according to the first service qualification, the first IP subnet being different than the default IP subnet;

receiving a second indication that the second wireless subscriber has been authenticated by a second service provider, wherein the second indication provides a second service qualification indicating at least one of (i) one or more types of services authorized for the second wireless subscriber and (ii) one or more extents of service authorized for the second wireless subscriber;

~~and responsively~~ responsive to the second indication, assigning the second wireless subscriber to operate in a second IP subnet of the access network according to the second service qualification, the second IP subnet being different than the default IP subnet;

handling communications in the default IP subnet according to a default logic set;

handling communications in the first IP subnet according to a first logic set different than the default logic set; and

handling communications in the second IP subnet according to a second logic set different than both the default logic set and the first logic set.

13. (Currently amended) A method comprising:

receiving from a subscriber on an access network an authentication request, the authentication request identifying the subscriber and identifying a designated service provider from among a plurality of service providers;

sending the authentication request to the designated service provider;

receiving from the designated service provider an authentication response indicating successful authentication of the subscriber by the designated service provider, wherein the authentication response provides a service qualification, wherein the service qualification indicates at least one of (i) one or more types of services authorized for the subscriber and (ii) one or more extents of service authorized for the subscriber;

responsive to the authentication response, assigning the subscriber to operate in a designated layer of the access network set aside for subscribers that have been authenticated by the designated service provider and to operate according to the service qualification; and serving the subscriber in the designated layer of the access network.

14. (Original) The method of claim 13, wherein the access network is an IP network and the designated layer is an IP subnet, and wherein assigning the subscriber to operate in the designated layer comprises assigning to the subscriber an IP address in the IP subnet.

15. (Original) The method of claim 14, wherein serving the subscriber in the designated layer comprises handling communications with the subscriber according to a logic set established for the designated layer.

16. (Original) The method of claim 15, wherein handling communications with the subscriber according to the logic set established for the designated layer comprises:

detecting a packet bearing the IP address assigned to the subscriber; and  
responsively applying the logic set to restrict transmission of the packet.

17. (Currently amended) The method of claim 13, wherein serving the subscriber in the designated layer of the access network comprises:

a gateway on the access network detecting a web page being sent to the subscriber;  
and  
the gateway modifying the web page to include an advertisement for the designated service provider.

18. (Original) The method of claim 13, further comprising prompting the subscriber to provide the authentication request.

19. (Original) The method of claim 18, wherein prompting the subscriber for the authentication request comprises:

presenting to the subscriber a set of the plurality of service providers; and  
prompting the subscriber to select a service provider from among the plurality presented, wherein the subscriber selects the designated service provider from among the plurality.

20. (Original) The method of claim 13, wherein the access network comprises a wireless access network.

21. (Currently amended) A method carried out by an access network, the method comprising:

prompting a first client station to select a service provider from among a plurality of service providers, and receiving a signal from the first client station, indicating a first selected service provider;

sending a first authentication request message for the first client station to the first selected service provider, the first authentication request message indicating authentication information for the first client station;

receiving a first authentication response message from the first selected service provider, the first authentication response message indicating that first client station is authenticated by the first selected service provider, wherein the first authentication response provides a first service qualification that indicates at least one of (i) one or more types of services authorized for the first client station and (ii) one or more extents of service authorized for the first client station; and

in response to the first authentication response message, restricting the client station to communications in a first logical layer of the access network associated with the first selected service provider and according to the first service qualification.

22. (Currently amended) The method of claim 21, further comprising:

prompting a second client station to select a service provider from among a plurality of service providers, and receiving a signal from the second client station, indicating a second selected service provider;

sending a second authentication request message for the second client station to the first selected service provider, the second authentication request message indicating authentication information for the first client station;

receiving a second authentication response message from the second selected service provider, the second authentication response message indicating that second client station is authenticated by the second selected service provider, wherein the second authentication response provides a second service qualification that indicates at least one of (i) one or more types of services authorized for the second client station and (ii) one or more extents of service authorized for the second client station; and

in response to the second authentication response message, restricting the second client station to communications in a second logical layer of the access network associated with the second selected service provider and according to the second service qualification.

23. (Currently amended) A communication system comprising:

means for prompting a first client station to select a service provider from among a plurality of service providers, and for receiving a signal from the first client station, indicating a first selected service provider;

means for sending a first authentication request message for the first client station to the first selected service provider, the first authentication request message indicating authentication information for the first client station;

means for receiving a first authentication response message from the first selected service provider, the first authentication response message indicating that first client station is authenticated by the first selected service provider, wherein the first authentication response provides a first service qualification, where the first service qualification indicates



at least one of (i) one or more types of services authorized for the first client station and (ii) one or more extents of service authorized for the first client station; and

means for responding to the first authentication response message by restricting the client station to communications in a first logical layer of the access network associated with the first selected service provider and according to the first service qualification.

24. (Currently amended) The communication system of claim 23, further comprising:

means for prompting a second client station to select a service provider from among a plurality of service providers, and for receiving a signal from the second client station, indicating a second selected service provider;

means for sending a second authentication request message for the second client station to the first selected service provider, the second authentication request message indicating authentication information for the first client station;

means for receiving a second authentication response message from the second selected service provider, the second authentication response message indicating that second client station is authenticated by the second selected service provider, wherein the second authentication response provides a second service qualification, wherein the second service qualification indicates at least one of (i) one or more types of services authorized for the second client station and (ii) one or more extents of service authorized for the second client station; and

means for responding to the second authentication response message by restricting the second client station to communications in a second logical layer of the access network

associated with the second selected service provider and according to the second service qualification.